

**EXHIBIT A**  
**Road Decommissioning – Bluff and Camp Creeks**  
**Statement of Work**

Under direction of the Department of Fish and Game, and under the following conditions and terms, the Grantee will:

1. Improve spawning and rearing habitat by reducing sediment delivery for coho and Chinook salmon and steelhead trout in Bluff and Camp creeks tributaries to Klamath River in Humboldt County. The objective is to save 36,000 cubic yards of sediment from delivery by dispersing road runoff on 19.3 miles of road, reestablishing drainage patterns at 65 stream crossings and removing or stabilizing sediment from sites along the alignment.
2. Conduct work on the Klamath Watershed. The project is located in Township 11N, Range 04E, Sections 22, 23, 26, 27, 34, and 35 of the Fish Lake 7.5 Minute U.S.G.S. Quadrangle; Township 11N, Range 05E, Sections 22, 23, and 26 of the Orleans 7.5 Minute U.S.G.S. Quadrangle; and Township 11N, Range 05E, Section 6, Township 12N, Range 05E, Section 31, and Township 11N, Range 04E, Section 1 of the Lonesome Ridge 7.5 Minute U.S.G.S. Quadrangle; 123°39'0"W, 41°24'0"N through 41° 22'30"N, 123° 40'30"W, 41° 19'30"N through 41° 18'0"N, 123° 36'0"W and 123° 34'30"W, 41° 19'30"N through 41° 18'0"N, as depicted in Exhibit C, Project Location Maps 1, 2, and 3, which is attached and made part of this agreement by this reference.
3. Decommission 19.3 miles of road thereby saving 36,000 cubic yards of sediment from delivery to Bluff and Camp creeks and tributaries, as described in Exhibit D, Road Table, which is attached and made part of this agreement by this reference. Fill slope and stream crossing fill from approximately 65 stream crossings and landing/slide/fill/slope sites will be excavated and stored in stable locations. The following treatments will be implemented where appropriate:
  - Excavation of in-place stream crossings at locations where roads or landings were built across stream channels. This includes complete excavation of the fill, including the culvert or Humboldt log crossing so the original stream bed and side slopes are exhumed. A stream crossing excavation includes removing the culvert and the underlying and the adjacent fill material. Complete excavation of stream crossing fills, includes 100 year flood channel bottom widths and 2:1 or otherwise stable side slopes. Armor stream crossings with rock where it will minimize post-decommissioning adjustments. When possible the excavated spoil will be stored at nearby stable locations where it will not erode. If there is a limited amount of stable storage locations at the excavation site the crossing fill material will be hauled off-site for storage.
  - Road surface treatments: 1) ripping of the surface of the road or landing using mechanical rippers to reduce surface runoff and improve revegetation; 2) in-place outslipping or the excavation of unstable side cast material that could fail and deliver sediment to a stream along the outside edge of a road prism or landing and the replacement of the spoil on the roadbed against the corresponding adjacent cutbank, or

in close proximity of the site; 3) exported out-sloping which involves not placing the material against the cutbank so the material is end hauled to a spoil disposal site; 4) installation of cross drains or deep water bars at 50, 75, 100 or 200 foot intervals or as necessary at springs and seeps to disperse road surface runoff. The cross road drains provide road surface drainage and prevent the collection of concentrated runoff on the former roadbed.

- Seeding and mulching of all exposed soils which may deliver sediment to a stream. Woody debris will be concentrated on finished slopes adjacent to stream crossings. The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years.
4. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured.
  5. Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve aesthetics only.
  6. Notify the Grant Manager a minimum of five working days before any fish bearing stream reaches are dewatered and the stream flow diverted. The notification will provide a reasonable time for Department personnel to supervise the implementation of the water diversion plan and oversee the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Grantee will implement the following measures to minimize harm and mortality to listed salmonids:
    - Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year.
    - The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible.
    - All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 2000.
    - The Grantee will provide fish relocation data to the Grant Manager on a form provided by the Department of Fish and Game.
    - Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
  7. All road decommissioning will be done in accordance with techniques described in the Handbook for Forest and Ranch Roads, (PWA, 1994c.) and the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, Volume II, Part X, January 2004. All road decommissioning and upgrade sites and techniques shall be approved by the Grant Manager before any equipment work takes place.

8. All habitat improvements will follow techniques described in the Third Edition, January 1998, of the *California Salmonid Stream Habitat Restoration Manual*, Flosi et al and the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, Volume II, Part XI, January 2004.
9. Work in flowing streams is restricted to June 15 through October 31. Actual project start and end dates, within this timeframe, are at the discretion of the Department of Fish and Game.
10. Avoidance measures regarding Marbled Murrelet (*Brachyrampus marmoratus*) and Northern Spotted Owl (*Strix occidentalis caurina*) will be implemented consistent with the January 2007, USDA Environmental Assessment Orleans Transportation and Road Restoration Project.
11. An annual report will be submitted each year, no later than November 15, detailing the work completed that field season. The annual report will include, but not necessarily be limited to the following where applicable:
  - Construction start and end dates
  - Percentage of the project completed in total to date
  - Dewatering and fish relocation data on DFG data sheet (to be provided by the DFG Grant Manager upon request)
  - Construction start and end dates for work to be implemented the following season

The annual report will also include on a site by site basis:

- Road length segment decommissioned per road segment
  - Sediment spoils volume estimate per road segment
  - Upslope stream crossings decommissioned (not for fish passage)
  - Sediment volume prevented from entering the stream per crossing
  - Sediment spoils volume estimate per crossing
  - Upslope area treated (sq ft) (landslides, bank stabilization)
12. Upon completion of the project, the Grantee shall submit two hard copies of a final written report and one electronic, Microsoft Word compatible, copy on CD. The report shall include, but not necessarily be limited to the following information:
    - Grant number
    - Project name
    - Geographic area (e.g., watershed name)
    - Location of work – show project location using U.S.G.S. 7.5 minute topographical map or appropriately scaled topographical map
    - Geospatial reference/location (lat/long is preferred – defined as point, line, or polygon)
    - Project start and end dates and the number of person hours expended

- Total of each fund source, by line item, expended to complete the project, breaking down Grant dollars, by line item, and any other funding, including type of match (cash or in-kind service)
- Expected benefits to anadromous salmonids from the project
- Labeled before and after photographs of restoration activities and techniques
- Specific project access using public and private roads and trails, with landowner name and address
- Complete as built project description
- Report measurable metrics for the project by responding to the restoration project metrics listed below.

Habitat Protection and Restoration Projects– Reporting Metrics (HU) (Report N/A to those that do not apply)

Habitat Projects: (all)

- Identify the watershed/sub-basin plan or assessment in which the project is identified as a priority.
- Name the priority habitat limiting factors identified in that plan that are addressed by the project
- Type of monitoring included in the project
  - Design spec achieved
  - Fish movement/abundance
- Number of stream miles treated/affected by the project within the project boundaries.

Upland Habitat Projects (HU)

- Number of actions (road decommission / upgrade)
- Total acres of upslope area treated.
- Total miles of road treated.
- Miles of road treated for road drainage system improvements.
- Miles of road decommissioned.
- Number of cubic yards of sediment saved from entering the stream.

Riparian Habitat Projects (HR, HS)

- Miles of stream treated overall, count stream reach only once.
- Miles of riparian stream bank treated, measure both sides of the bank.
- Total acres of riparian area treated.
- Acres of riparian area planted.
- Species scientific names of plants planted.

13. The USDA Forest Service, Six Rivers National Forest will acknowledge the participation of the Department of Fish and Game, Fisheries Restoration Grant funds on any signs,

flyers, or other types of written communication or notice to advertise or explain the Road Decommissioning – Bluff and Camp Creeks Project.

Exhibit C  
Road Decommissioning – Bluff and Camp Creeks  
Project Location Map 1  
T11N, R04E, S22, 23, 26, 27, 34, 35 Fish Lake Quad  
Humboldt County

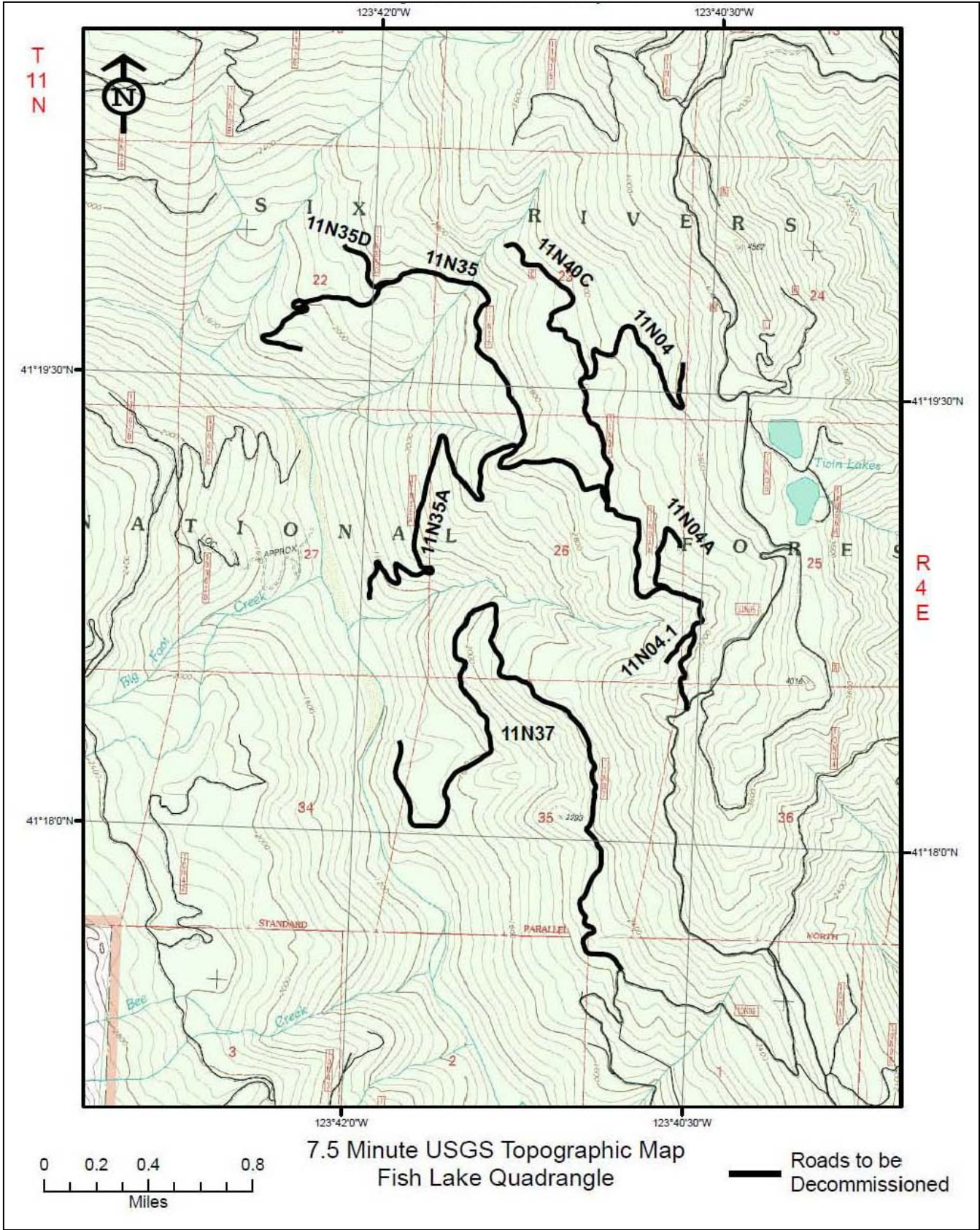




Exhibit C  
Road Decommissioning – Bluff and Camp Creeks  
Project Location Map 2

T11N, R05E, S06; T12N R05E S31; T11N, R04E, S01 Fish Lake and Lonesome Ridge Quads  
Humboldt, Del Norte and Siskiyou Counties

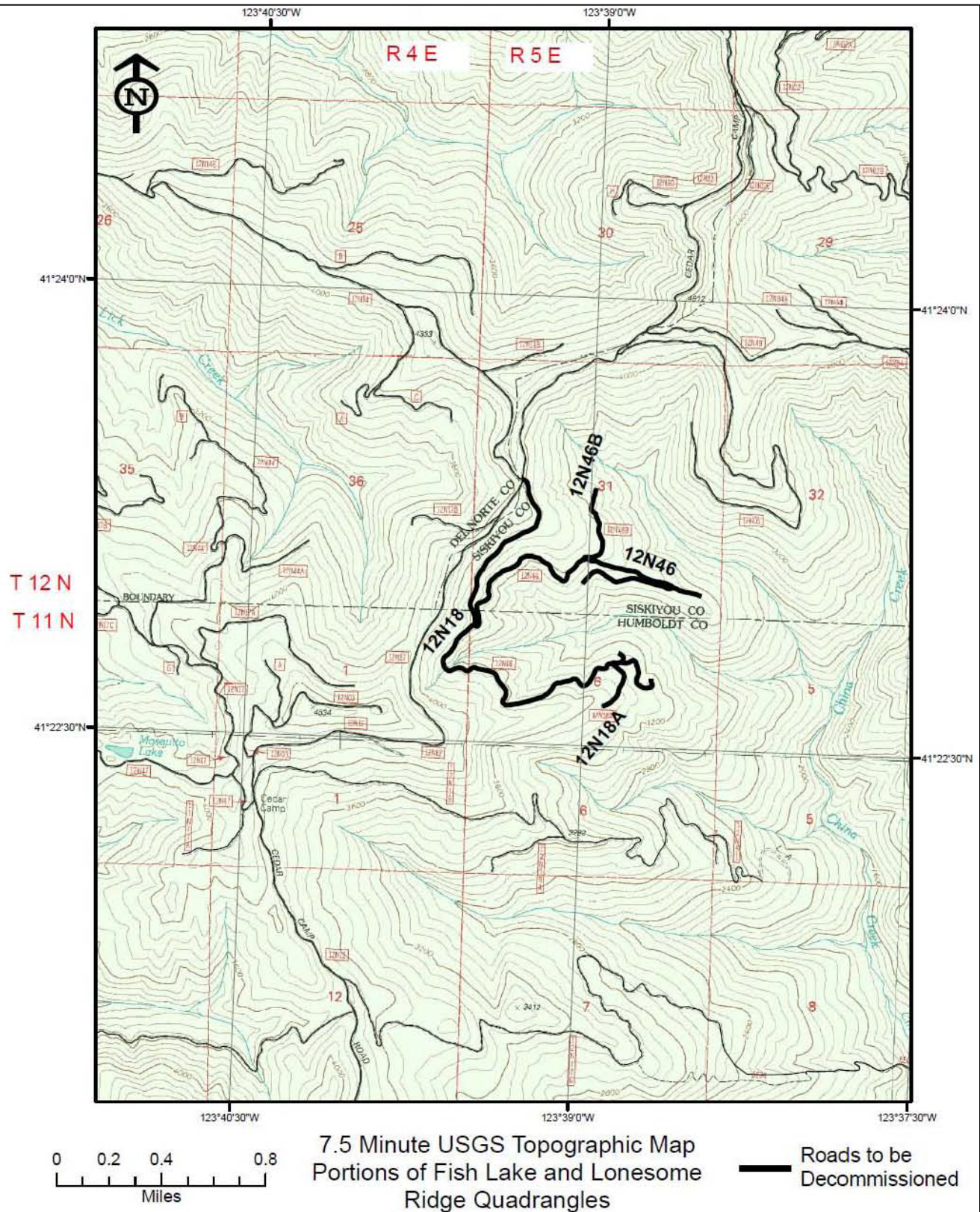




Exhibit C  
 Road Decommissioning – Bluff and Camp Creeks  
 Project Location Map 3  
 T11N, R05E, S22, 23, 25 & 26; T11N, R04E, S15 Orleans Quad  
 Humboldt County

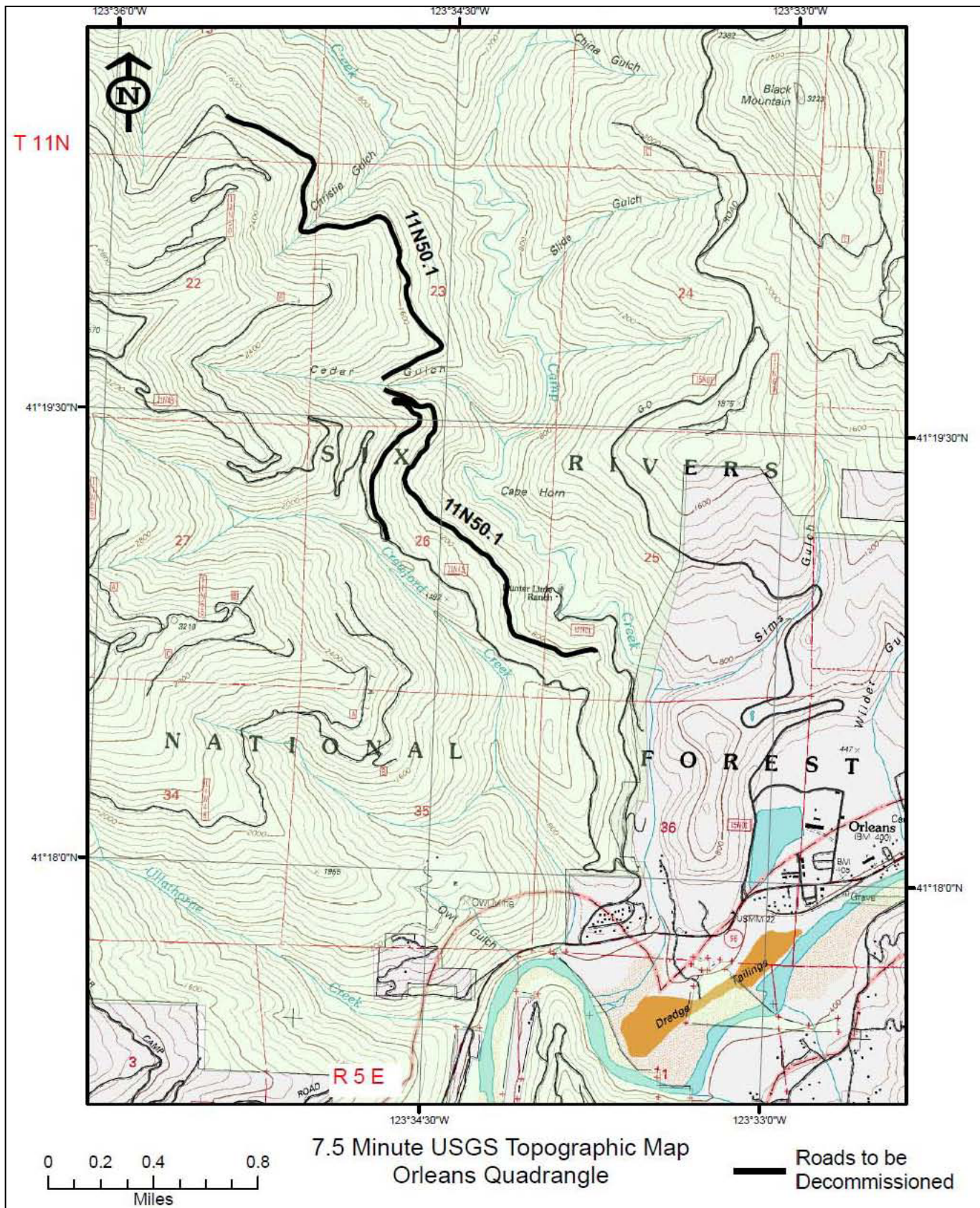




EXHIBIT C  
Road Decommissioning – Bluff and Camp Creeks  
Road Table

<b>Summary of Project Tasks and Fill Volume Estimates</b>				
<b>Watershed</b>	<b>Road</b>	<b>Mileage</b>	<b>Crossings</b>	<b>Saved</b>
Bluff	11N37	3.2	9	950
Bluff	11N35A	1.5	1	130
Bluff	11N04	2.4	9	2,616
Bluff	11N04A	0.4	0	1,056
Bluff	11N04C	0.85	3	1,254
Bluff	11N04.1	0.15	0	158
Bluff	11N35	2.55	7	1,807
Bluff	11N35D	0.3	1	276
Camp	11N50.1	3.83	16	14,233
Camp	12N46B	0.34	2	559
Camp	12N46	1.55	6	854
Camp	12N18A	0.19	0	502
Camp	12N18	2.01	11	12,356
	<b>Totals</b>	<b>19.27</b>	<b>65</b>	<b>36,751</b>

California Department of Fish and Game  
Natural Diversity Database  
Selected Elements by Common Name - Portrait  
723317\_Road Decommissionin - Bluff and Camp Creeks

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 American peregrine falcon <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	unknown code...	G4T3	S2	
2 Bald Mountain milk-vetch <i>Astragalus umbraticus</i>	PDFAB0F990			G4	S2.3	2.3
3 California globe mallow <i>Iliamna latibracteata</i>	PDMAL0K040			G3	S2.2	1B.2
4 Central Valley spring-run chinook salmon ESU <i>Oncorhynchus tshawytscha spring-run</i>	AFCHA0205A	Threatened	Threatened	G5	S1	
5 Coast Range lomatium <i>Lomatium martindalei</i>	PDAP11B140			G5	S2.3	2.3
6 Columbia yellow cress <i>Rorippa columbiae</i>	PDBRA27060			G3	S1.1	1B.2
7 Del Norte salamander <i>Plethodon elongatus</i>	AAAAD12050			G4	S3	SC
8 Dudley's rush <i>Juncus dudleyi</i>	PMJUN01390			G5	S2.3?	2.3
9 English Peak greenbriar <i>Smilax jamesii</i>	PMSMI010D0			G2	S2	1B.3
10 Heckner's lewisia <i>Lewisia cotyledon var. heckneri</i>	PDPOR04052			G4T2	S2.2	1B.2
11 Howell's montia <i>Montia howellii</i>	PDPOR05070			G3G4	S3	2.2
12 Humboldt marten <i>Martes americana humboldtensis</i>	AMAJF01012			G5T2T3	S2S3	SC
13 Karok hesperian <i>Vespericola karokorum</i>	IMGASA4040			G2G3	S2S3	
14 Klamath gentian <i>Gentiana plurisetosa</i>	PDGEN060V0			G2G3	S2S3.3	1B.3
15 Klamath/No Coast Spring Run Chinook/Summer Steelhead Stream	CARB2333CA			G?	SNR	
16 Klamath/North Coast Fall/Winter Run Chinook Salmon River	CARB2332CA			G?	SNR	
17 Klamath/North Coast Interior Headwater Fishless Stream	CARB2220CA			G?	SNR	
18 Klamath/North Coast Rainbow Trout Stream	CARB2312CA			G?	SNR	
19 Marble Mountain campion <i>Silene marmorensis</i>	PDCAR0U0Z0			G2	S2.2	1B.2
20 Oregon fireweed <i>Epilobium oreganum</i>	PDONA060P0			G2	S2.2	1B.2
21 Oregon goldthread <i>Coptis laciniata</i>	PDRAN0A020			G4G5	S2.2	2.2
22 Oregon sedge <i>Carex halliana</i>	PMCYP035M0			G4G5	S1.3?	2.3
23 Oregon shoulderband <i>Helminthoglypta hertleini</i>	IMGASC2280			G1	S1	

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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24 Pacific fisher <i>Martes pennanti (pacifica) DPS</i>	AMAJF01021	Candidate	unknown code...	G5	S2S3	SC
25 Pacific tailed frog <i>Ascaphus truei</i>	AAABA01010			G4	S2S3	SC
26 Siskiyou paintbrush <i>Castilleja miniata ssp. elata</i>	PDSCR0D213			G5T3	S2.2	2.2
27 Sonoma tree vole <i>Arborimus pomo</i>	AMAFF23030			G3	S3	SC
28 Tracy's sanicle <i>Sanicula tracyi</i>	PDAP11Z0K0			G3	S3.2	4.2
29 Trinity shoulderband <i>Helminthoglypta talmadgei</i>	IMGASC2630			G1G3	S1S3	
30 Wolf's evening-primrose <i>Oenothera wolfii</i>	PDONA0C1K0			G1	S1.1	1B.1
31 bald eagle <i>Haliaeetus leucocephalus</i>	ABNKC10010	Delisted	Endangered	G5	S2	
32 black swift <i>Cypseloides niger</i>	ABNUA01010			G4	S2	SC
33 chinook salmon - spring-run Klamath-Trinity Rivers pop. <i>Oncorhynchus tshawytscha</i>	AFCHA02056			G5	S1S2	SC
34 coast cutthroat trout <i>Oncorhynchus clarkii clarkii</i>	AFCHA0208A			G4T4	S3	SC
35 coast fawn lily <i>Erythronium revolutum</i>	PMLIL0U0F0			G4	S3	2.2
36 coast sidalcea <i>Sidalcea oregana ssp. eximia</i>	PDMAL110K9			G5T1	S1.2	1B.2
37 elongate copper moss <i>Mielichhoferia elongata</i>	NBMUS4Q022			G4?	S2.2	2.2
38 foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050			G3	S2S3	SC
39 ghost-pipe <i>Monotropa uniflora</i>	PDMON03030			G5	S2S3	2.2
40 giant fawn lily <i>Erythronium oregonum</i>	PMLIL0U0C0			G5	S2.2	2.2
41 great blue heron <i>Ardea herodias</i>	ABNGA04010			G5	S4	
42 hooded lancetooth <i>Ancotrema voyanum</i>	IMGAS36130			G1G2	S1S2	
43 marbled murrelet <i>Brachyramphus marmoratus</i>	ABNNN06010	Threatened	Endangered	G3G4	S1	
44 northern goshawk <i>Accipiter gentilis</i>	ABNKC12060			G5	S3	SC
45 northern meadow sedge <i>Carex praticola</i>	PMCYP03B20			G5	S2S3	2.2
46 northern red-legged frog <i>Rana aurora</i>	AAABH01021			G4T4	S2?	SC



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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
47 northern spotted owl <i>Strix occidentalis caurina</i>	ABNSB12011	Threatened		G3T3	S2S3	SC
48 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	
49 pale yellow stonecrop <i>Sedum laxum ssp. flavidum</i>	PDCRA0A0L2			G5T3Q	S3.3	4.3
50 robust false lupine <i>Thermopsis robusta</i>	PDFAB3Z0D0			G2Q	S2.2	1B.2
51 ruffed grouse <i>Bonasa umbellus</i>	ABNLC11010			G5	S4	
52 silver-haired bat <i>Lasionycteris noctivagans</i>	AMACC02010			G5	S3S4	
53 slender silver moss <i>Anomobryum julaceum</i>	NBMUS80010			G4G5	S1.3	2.2
54 small groundcone <i>Boschniakia hookeri</i>	PDORO01010			G5	S1S2	2.3
55 southern torrent salamander <i>Rhyacotriton variegatus</i>	AAAAJ01020			G3G4	S2S3	SC
56 summer-run steelhead trout <i>Oncorhynchus mykiss irideus</i>	AFCHA0213B			G5T4Q	S2	SC
57 thread-leaved beardtongue <i>Penstemon filiformis</i>	PDSCR1L2A0			G3	S3	1B.3
58 water bulrush <i>Schoenoplectus subterminalis</i>	PMCYP0Q1G0			G4G5	S2S3	2.3
59 western pond turtle <i>Actinemys marmorata</i>	ARAAD02030			G3G4	S3	SC
60 white-flowered rein orchid <i>Piperia candida</i>	PMORC1X050			G3	S3.2	1B.2